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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,984	02/05/2004	Otto Carl Ziemann	A01489	5214

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EXAMINER

RONESI, VICKEY M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/772,984	Applicant(s) ZIEMANN ET AL.	
	Examiner Vickey Ronesi	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/10/04, 7/15/04</u> | 6) <input type="checkbox"/> Other: ____ |

Wi.

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because antecedent basis is had for the plural "unsaturated fatty acid esters" and not the singular "unsaturated fatty acid ester." Thus, "said unsaturated fatty acid ester is" should be replaced with "said unsaturated fatty acid esters are."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Zuckert (US 4,229,331) in view of evidence given by Solomons (*Organic Chemistry, 6th Edition*), Othalek et al (US 3,418,151), and Fick (US 4,627,192).

Zuckert discloses an aqueous emulsion comprising crosslinkable polyethylene glycol and esters of unsaturated oil fatty acids with an iodine number over 125 such as soya oil, safflower oil, and sunflower oil (col. 3, lines 57-64). The aqueous emulsion has less than 20 % organic auxiliary solvents (col. 4, lines 57-58) and is exemplified as having 0 % organic solvents (table in col. 6), wherein the emulsions are air dried (i.e., at ambient temperature which inherently gives a film formation temperature of less than 25°C).

While Zuckert does not explicitly recite the composition of the unsaturated oil fatty acids (in particular, the amount of triethylenically unsaturated fatty acids), evidence is given by the

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aforementioned references regarding the composition of the recited unsaturated oil fatty acids of Zuckert. With respect to soya oil (i.e., soybean oil), Solomons discloses that soya oil contains 20-30 mol % oleic, 50-58 mol %, linoleic, and 5-10 mol % linolenic (triethylenically unsaturated) acids (note that the molecular weights of each fatty acid--oleic acid: 282, linoleic acid: 280, and linolenic acid: 278--are approximately the same and thus mol % basis is approximately wt % basis) (page 1096). With respect to safflower oil, Otrhalek et al teaches that safflower oil contains 8.0 wt % palmitic, 3.0 wt % stearic, 1.5 wt % oleic, 75.0 linoleic, and 0.5 wt % linolenic acids (col. 3, lines 47-48). With respect to sunflower oil, Fick teaches that sunflower oil primarily contains palmitic, stearic, oleic, and linoleic acids, with oleic and linoleic acid accounting for about 90% of the total fatty acid content (col. 2, lines 7-11).

In light of the above, it is clear that Zuckert anticipates the presently cited claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bors et al (US 5,484,849).

Bors et al discloses an ambient (i.e., less than 25°C) air curing composition comprising an acetoacetate functional polymer (col. 2, lines 14 to col. 3, line 23) and an 0.5-15 wt % (col. 6, lines 4-7) autoxidizable additive such as simple esters of drying oils (col. 5, lines 57-61), e.g., ethyl linoleate (col. 9, line 31).

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Bors et al does not explicitly disclose the average iodine number of the fatty acid ester or exemplify a VOC content of less than 5 wt %.

With respect to the iodine number, it is the examiner's position that the iodine number is a result effective variable because changing it will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In particular, autoxidative processes are dependent on ethylenic unsaturations. Thus, it would have been well within the capabilities of one of ordinary skill in the art to utilize a fatty acid ester autoxidative additive with an appropriate amount of unsaturation, which is indicated by the iodine number, to obtain desired end results. Moreover, given that ethyl linoleate is unsaturated, it is considered to be intrinsic that it would have an iodine number of greater than 50.

With respect to the VOC content, Bors et al only exemplifies an aqueous composition with a VOC content of 7.6 wt %, nonetheless, given that the organic solvents (propylene glycol and diisopropyladipate) are not mandatorily present in Bors et al's composition and only seem to be a part of the inventive examples because it conveniently came in the package with the autoxidative additive and given that low levels of solvent are desirable to avoid safety hazards, it is considered that it would have been obvious to one of ordinary skill in the art to not utilize the optional organic solvents and obtain the presently claimed VOC.

In light of the above discussion, it would have been obvious to one of ordinary skill in the art to utilize the disclosure of Bors et al to obtain a nonyellow crosslinked coating and thereby arrive at the presently cited claims.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 4, 5, 7, and 8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 7 of copending Application No. 10/858,872 (published as US PGPub 2004/0247783). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US appl. '873 claims an aqueous copolymer composition comprising polymer having pendant crosslinking groups from the anionic monomer and an unsaturated fatty acid ester, wherein the VOC is less than 5 wt %. While US appl. '873 does not claim a combination that includes the VOC content and the specificities of the fatty acid ester, case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970). In particular, on page 10-11 of the present specification, the unsaturated

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fatty acid ester is defined as having an iodine number of at least 50 and no more than 10 wt % of triethylenically unsaturated fatty acid ester.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1 and 7 are directed to an invention not patentably distinct from claims 2 and 7 of commonly assigned copending Application No. 10/858,872 (published as US PGPub 2004/0247783). Specifically, see the discussion set forth in paragraph 4 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 10/858,872 (published as US PGPub 2004/0247783), discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

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Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/8/2005

VR



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